

Schedule 13


Department of Regulatory Agencies

Funding Request for The FY 2020-21 Budget Cycle

Request Title

R-02 Intrastate Pipeline Safety Enhancements

Dept. Approval By:

 10/22/19

Supplemental FY 2019-20

OSPB Approval By:



Budget Amendment FY 2020-21

X

Change Request FY 2020-21

Summary Information	Fund	FY 2019-20		FY 2020-21		FY 2021-22
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
Total of All Line Items Impacted by Change Request	Total	\$21,304,149	\$0	\$22,210,461	\$511,062	\$491,073
	FTE	98.8	0.0	100.3	4.0	4.0
	GF	\$593,554	\$0	\$550,074	\$0	\$0
	CF	\$19,993,641	\$0	\$20,939,886	\$511,062	\$491,073
	RF	\$633,781	\$0	\$597,350	\$0	\$0
	FF	\$83,173	\$0	\$123,151	\$0	\$0

Line Item Information	Fund	FY 2019-20		FY 2020-21		FY 2021-22
		Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
01. Executive Director's Office and Administrative Services, (A) Executive Director's Office and Administrative Services, (1) Executive Director's Office and Administrative Services - Health, Life, and Dental	Total	\$5,549,722	\$0	\$5,986,925	\$38,388	\$38,388
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$212,959	\$0	\$181,273	\$0	\$0
	CF	\$4,948,102	\$0	\$5,396,076	\$38,388	\$38,388
	RF	\$346,736	\$0	\$331,139	\$0	\$0
	FF	\$41,925	\$0	\$78,437	\$0	\$0

01. Executive Director's Office and Administrative Services, (A) Executive Director's Office and Administrative Services, (1) Executive Director's Office and Administrative Services - Short-term Disability	Total	\$69,899	\$0	\$69,899	\$607	\$607
	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$2,479	\$0	\$2,479	\$0	\$0
	CF	\$61,979	\$0	\$61,979	\$607	\$607
	RF	\$4,757	\$0	\$4,757	\$0	\$0
	FF	\$684	\$0	\$684	\$0	\$0

Summary Information	FY 2019-20			FY 2020-21		FY 2021-22
	Fund	Initial Appropriation	Supplemental Request	Base Request	Change Request	Continuation
	Total	\$2,073,813	\$0	\$2,128,475	\$17,861	\$17,861
01. Executive Director's Office and Administrative Services, (A) Executive Director's Office and Administrative Services, (1) Executive Director's Office and Administrative Services - Amortization Equalization Disbursement	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$73,558	\$0	\$67,661	\$0	\$0
	CF	\$1,838,829	\$0	\$1,908,072	\$17,861	\$17,861
	RF	\$141,144	\$0	\$130,727	\$0	\$0
	FF	\$20,282	\$0	\$22,015	\$0	\$0
	Total	\$2,073,813	\$0	\$2,128,475	\$17,861	\$17,861
	FTE	0.0	0.0	0.0	0.0	0.0
01. Executive Director's Office and Administrative Services, (A) Executive Director's Office and Administrative Services, (1) Executive Director's Office and Administrative Services - Supplemental Amortization Equalization Disbursement	GF	\$73,558	\$0	\$67,661	\$0	\$0
	CF	\$1,838,829	\$0	\$1,908,072	\$17,861	\$17,861
	RF	\$141,144	\$0	\$130,727	\$0	\$0
	FF	\$20,282	\$0	\$22,015	\$0	\$0
	Total	\$261,291	\$0	\$261,291	\$4,812	\$9,623
01. Executive Director's Office and Administrative Services, (A) Executive Director's Office and Administrative Services, (1) Executive Director's Office and Administrative Services - Vehicle Lease Payments	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$261,291	\$0	\$261,291	\$4,812	\$9,623
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0
	Total	\$10,635,099	\$0	\$11,028,731	\$401,333	\$401,333
07. Public Utilities Commission, (A) Public Utilities Commission, (1) Public Utilities Commission - Personal Services	FTE	98.8	0.0	100.3	4.0	4.0
	GF	\$231,000	\$0	\$231,000	\$0	\$0
	CF	\$10,404,099	\$0	\$10,797,731	\$401,333	\$401,333
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0
	Total	\$640,512	\$0	\$606,665	\$30,200	\$5,400
07. Public Utilities Commission, (A) Public Utilities Commission, (1) Public Utilities Commission - Operating Expenses	FTE	0.0	0.0	0.0	0.0	0.0
	GF	\$0	\$0	\$0	\$0	\$0
	CF	\$640,512	\$0	\$606,665	\$30,200	\$5,400
	RF	\$0	\$0	\$0	\$0	\$0
	FF	\$0	\$0	\$0	\$0	\$0
Auxiliary Data						
Requires Legislation?	NO					
Type of Request?	Department of Regulatory Agencies Prioritized Request		Interagency Approval or Related Schedule 13s:		Impacts DPA	



Department Priority: R-02
Request Detail: Intrastate Pipeline Safety Enhancements

Summary of Incremental Funding Change for FY 2020-21			
	FY 2019-20	FY 2020-21	FY 2021-22
Total Funds	\$0	\$511,062	\$491,073
FTE	0.0	4.0	4.0
General Fund	\$0	\$0	\$0
Cash Funds	\$0	\$511,062	\$491,073
Reappropriated Funds	\$0	\$0	\$0
Federal Funds	\$0	\$0	\$0

Summary of Request:

The Department requests \$511,062 in cash funds spending authority and 4.0 FTE in FY 2020-21 and \$491,073 in FY 2021-22 and ongoing in order to bolster inspection resources within the PUC Pipeline Safety Program to ensure adequate consumer safety with respect to natural gas pipelines throughout the State. Adding additional inspector FTE will move Colorado beyond federal minimum standards for pipeline regulation and increase the ability for the inspection of additional pipeline, which is expected to reduce the risk of serious incidents involving pipelines.

Current Program:

The Public Utilities Commission's Gas Pipeline Safety unit (GPS unit) regulates intrastate gas pipelines that transport gas from midstream points to end retail users. Consumer safety is ensured via compliance with and enforcement of the State's intrastate pipeline safety regulations. The program inspects and monitors intrastate gas pipeline system operators under the annual review and certification of the federal U.S. DOT Pipeline and Hazardous Materials Safety Administration (PHMSA).

GPS Unit Regulation Background

Pipelines transport energy products throughout the country to heat and cool homes, power businesses and fuel transportation systems. Regulated pipelines include natural gas pipelines, liquid petroleum pipelines, and hazardous liquid pipelines. Both federal and state agencies regulate pipelines throughout the United States. Interstate pipelines are regulated by the federal Pipeline and Hazardous Materials Safety Administration (PHMSA) in the U.S. Department of Transportation. The federal government is responsible for developing, issuing and enforcing pipeline safety regulations. Most inspections, however, are conducted by state agencies. State regulations must be at least as stringent as federal regulations, and states are responsible for the regulation, inspection and enforcement of pipelines within state boundaries ("intrastate" pipelines).

The GPS unit has jurisdiction over intrastate gas pipelines including:

- gas distribution lines, which distribute gas to homes and businesses;
- gas transmission lines, which transport gas from processing facilities; and,
- gas gathering lines, which transmit natural gas from production wells to transmission pipelines.

Presently, the GPS unit, with 6.0 FTE, oversees intrastate pipelines with 56,246 miles of gas distribution lines, 7,731 miles of gas transmission lines, and 967 miles of regulated gas gathering lines – with an estimated 1.6 million points-of-delivery.

GPS Unit Methods of Regulation

The unit is primarily concerned with whether the pipelines are designed, operated and maintained in a manner that protects public safety. The gas pipeline safety unit accomplishes this by inspecting pipeline operators, investigating incidents, and providing training to pipeline operators.

1. **Pipeline Inspections.** Pipeline inspections are the primary means by which the GPS unit ensures compliance with safety standards to enhance public safety. Inspections are concerned with the following parameters::

- Design, construction and repair;
- Operations, such as procedures, processes and personnel qualifications;
- Maintenance;
- Risk management programs; and
- Drug and alcohol programs.

The gas pipeline safety unit performs several types of inspections necessary to ensure that gas pipelines meet the minimum safety standards defined by the federal government:

- Standard Inspections – Involve the procedures and processes that a pipeline operator must develop and use in the routine operations and maintenance of its pipeline system.
- Construction Inspections – Involve the design, construction and testing of a pipeline system.
- Integrity Management Inspections – Involve the integration of many different sources of information to identify and rank threats to pipelines, determine the likelihood of pipeline failure and implement measures to mitigate or reduce the possibility of a failure that impacts public safety. The program audits the entirety of these plans' development and implementation.
- Pipeline operators who have compliance problems or have new programmatic activity are inspected more frequently than other pipeline operators. Pipeline operator training, qualification inspections, incident investigations, damage prevention activities and follow-up compliance inspections are performed when necessary.

2. **Incident Investigations.** The GPS unit also investigates reported pipeline incidents that are from a variety of sources, including the pipeline operator's direct reports to the Commission, the National Response Center (NRC), other pipeline officials such as COGCC and OPS inspectors, local emergency responders and media reports. Reportable incidents include corrosion failure, incorrect operation, material failure of a pipe or weld, equipment failure, natural force damage and other damage and incidents. The Commission staff also conduct programmatic inspections of pipeline operator's damage prevention programs and determines its adequacy. Pipeline incidents have the potential for significant damage and it is an important part of the regulatory structure to investigate incidents to ensure consumer safety.
3. **Training Pipeline Operators.** The GPS unit also provides training to pipeline operators. PHMSA requires the gas pipeline safety unit to be staffed with trained inspectors, and it requires the inspectors attend multiple training sessions directed by the federal agency prior to being allowed to lead any inspections. Federal law requires each pipeline operator to obtain a pipeline operator identification number from PHMSA. PHMSA notifies the Commission of any new pipeline operators and changes in pipeline operator ownership, and the Commission works with the Colorado Oil and Gas Conservation Commission (COGCC), the Colorado Department of Labor and Employment's Division of Oil and Public Safety (OPS) and local governments to determine which pipeline operators fall within its jurisdiction.

As of the most recent CY 2018 reporting period, individual pipeline operators administered 3 private gas distribution systems, 9 municipal gas distribution systems, 16 master metered gas distribution systems, 6 liquid petroleum distribution systems (these three categories distribute gas to homes and businesses); 22 private gas transmission systems (these transport gas from processing facilities); and, 4 private gas gathering systems (these transmit natural gas from production wells to transmission pipelines). The following table shows recent numbers of such systems/operators by calendar year:

Number of Pipeline Operators by Calendar Year	
2013	48
2014	51
2015	64
2016	63
2017	66
2018	60

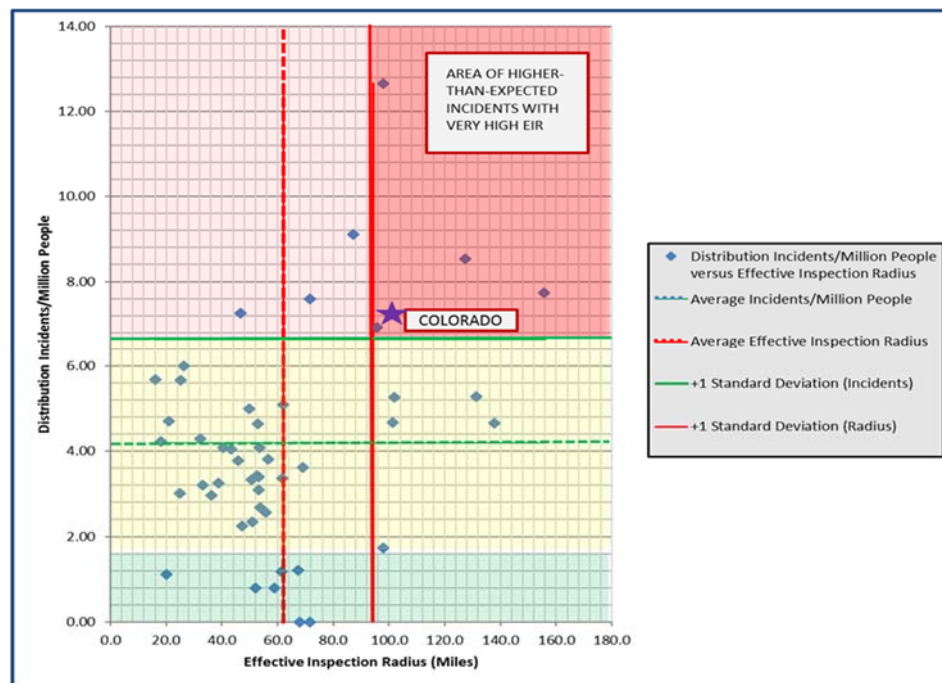
Program Resources. Despite the broad scope of federal regulations and the sheer number of pipeline miles regulated, the GPS unit has limited resources, comprised of 6.0 engineer FTE, who split time between conducting field inspections of some facilities and auditing information pipeline facilities with qualified materials, methods, and personnel and compliance of operators for monitoring, operating, and maintaining existing pipeline facilities in a safe manner. The program operates through a verified trust system in working to regulate operators, with PHMSA annually auditing the PUC Program's field and office work. Historical and recent audits indicate that the program is consistent and compliant with the metrics developed for state gas pipeline safety program evaluation. The table below provides program expenditures in FY 2018-19.

GPS Unit Actual Expenses FY 2018-19	
Personal Services/Staffing (6.0) FTE	734,046
Operating Expenses	37,612
All Other*	<u>104,350</u>
Total	876,008

*All other expenses include such overhead charges as indirect costs, and common policy costs.

Problem or Opportunity:

Even though the GPS unit's activities and performance satisfy and exceed federal minimum standards, further analysis show opportunities for safety improvements with respect to gas pipelines.



Distribution Incidents/Million Population versus Inspection Radius (2008 – 2018 data)

The chart above shows the number of serious distribution pipeline system incidents per million of state population (2008-2018), as well as an “effective inspection radius,” or EIR. This EIR is derived from the number of inspectors in each state program based on program data from 48 states – i.e., the number of miles covered by available inspector staff. As the table shows, the average serious incident rate for the time period of 2008-2018 was about 4 incidents per million people in most states, with an average EIR of about 60 miles. More revealingly, more than half of all states that have a larger inspection radius (“more ground to cover”) than the 60 mile median had a higher than expected number of incidents. Colorado’s EIR was nearly 100 miles and incidents per million people were over 1.5 times greater than the average of all states. More simply put, this indicates that Colorado has lower available inspector resources per pipeline mile, as the lower left-hand quadrant of the chart above shows a clear correlation between lower numbers of incidents per million people, and higher available inspector resources per pipeline mile. This suggests that Colorado, while meeting federal minimum standards, nevertheless has a 50% higher rate of serious distribution incidences,

and 50% more inspection ground to cover, than the average of all states. The number of inspectors and their availability to effectively cover a state has a definite impact on public safety.

Returning Colorado to at least the median inspection radius of a majority of other states can reasonably be expected to have a commensurate positive impact on the number of serious gas pipeline distribution incidents.

Proposed Solution:

The Department requests a total increased appropriation of \$511,062 in FY 2020-21 and \$491,073 in FY 2021-22 and ongoing to increase staff resources for the GPS Unit to allow Colorado to increase the effective inspection radius to assists in limiting the potential for serious gas pipeline distribution incidents. The Department believes this can be achieved through the following:

- Increase GPS unit Personal Services by 4.0 FTE (four Professional Engineer II positions). These positions will be responsible for carrying out additional inspections that do not take place with current resources, as well as investigating incidents.
- Add 4 inspection vehicles for the program to allow for increased ability to cover additional mileage for inspections
- Operating Expenses and centrally appropriated line items will need to be increased to offset the costs for vehicles and benefits for the expansion of services) by pro rata amounts.

The requested FTE will accomplish the following objectives:

1. Allow the GPS unit to reduce the effective inspection radius to levels commensurate with the national median.
2. Significantly increase inspections capacity per year across all types.
3. Significantly reduce the pipeline miles-to-inspector ratio.

Anticipated Outcomes:

The Department anticipates the allocation of additional resources will enhance intrastate pipeline safety and bring Colorado to within national averages for safety incidents.

Assumptions and Calculations:

The Personal Services estimates is based on the minimum salary for the position, PERA and Medicare estimates were calculated as 10.90% and 1.45% of base salaries, respectively. Operating dollars are estimated based on the standard onboarding operating costs for new hires.

Costs	FY 2020-21	FY 2021-22
Annual Salary (Professional Engineer II @ \$89,304)	\$ 357,216	\$ 357,216
PERA (10.90%)	\$ 38,937	\$ 38,937
AED (5%)	\$ 17,861	\$ 17,861
SAED (5%)	\$ 17,861	\$ 17,861
Medicare (1.45%)	\$ 5,180	\$ 5,180
STD (.17%)	\$ 607	\$ 607
Health/Life/Dental	\$ 38,388	\$ 38,388

Operating and Capital Expenses	\$ 30,200	\$ 5,400
Vehicle Lease Payments	\$ 4,812	\$ 9,623
Total	\$ 511,062	\$ 491,073

Supplemental, 1331 Supplemental or Budget Amendment Criteria:

Not applicable.